1280603

Hecla
MINING COMPANY

November 23, 2009

Sent via email

Eric Johnson
U.S. Environmental Protection Agency
Region 8, 8ENF-T
999 18th Street, Suite 300
Denver, Colorado 80202-2466

RE: Progress report for October 2009 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Mr. Johnson:

Per paragraph 64 of the Order, enclosed is a copy of the October 2009 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

Paul L. Glader
Manager Environmental Services

Encl

Cc: HMC Legal Dept (w/o attachments)
John Jacus, Esq. (DG&S)

Hecla
MINING COMPANY

November 23, 2009

Sent via U.S. Mail

Glenn Rogers, Chairman.
Shivwits Band of Paiute Indian Tribe
6060 West 3650 North
Ivins, Utah 84738

John Krause
Bureau of Indian Affairs
400 North 5th Street, Floor 12
Phoenix, AZ 85004

Kelly Youngbear
BIA Southern Paiute Agency
P.O. Box 720
St. George, UT 84771

RE: Progress report for October 2009 activities - Hecla Mining Company Apex Site (EPA ID No. UT982589848, Docket No. RCRA-8-99-06)

Dear Chairman Rogers, Mr. Krause and Ms. Youngbear:

Per paragraph 64 of the Order, enclosed is a copy of the October 2009 progress report for your records.

If you have any questions please do not hesitate to call me at (208) 769-4112 or e-mail at pglader@hecla-mining.com.

Sincerely,

Paul L. Glader
Manager Environmental Services

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Cc: HMC Legal Dept. (w/o attachments)
John Jacus, Esq. (DG&S) (w/o attachments)
Eric Johnson (USEPA, Region VIII) (w/o attachments)

Hecla
MINING COMPANY

November 23, 2009

MEMORANDUM TO: Apex File

COPIES TO: distribution

FROM: Paul Glader

SUBJECT: Progress Report No. 66 for period ending October 31, 2009; Pond 2 Final Closure - Apex Site, Washington County, Utah

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Summary

The monthly visual inspection, per the long term monitoring plan, was conducted on October 24. No unusual conditions were noted.

Geotechnical Monitoring

Based on the data showing that the facility has experienced consistently low settlement rates over the past three years, Hecla will continue to monitor the facility, however with survey data being collected on an annual basis.

The settlement monitors were surveyed on August 17, 2009. No appreciable movement was noted. MEI prepared a Surface Monument Survey Data Review. Based on surface monitoring survey data collected from January 2006 through August 2009:

- **Overall settlement of the reclaimed impoundment top surface continues to be very minor**
- **Settlement rates continue to slightly decrease**

Work Planned for Next Period

Visual inspection of site

Cost and Schedule

Committed costs in October 2009 were $431. Total project to date committed cost is approximately $1,475,000.

Supplemental Attachments

October 2009 site inspection report

August 17 monument monitoring survey

MEI Surface Monument Survey Data Review

October 2009 cost report

Annual Site Inspection Summary Sheet - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 1 of 4 - Summary

Date: 10-24-09

Inspector: D. Tramp

Cover System Component	Potential Problem		Allowable Limits	Limits Potentially Exceeded
Site Perimeter	Erosion or Fencing Issues		NA	NA
Cover System (outslopes, top, rock)	Subsidence		**Minor**: ponding < 1" some gullying / erosion	Yes ✓* No ___
			Significant: see Table 2	Yes ___* No ✓
	Embankment Slope Stability		excessive movement or surface cracks > than 1"	Yes ___* No ✓
	Gullying	on top	depth > 1"	Yes ___* No ✓
		at embankment crest or on outslope	depth > 2"	Yes ___* No ✓
		w/in normal flow channel in diversion channel	no gullying allowed	Yes ___* No ✓
		w/in diversions at toe of impoundment outslope	no gullying allowed	Yes ___* No ✓
		in diversion channel at any other location	NA	NA
	Erosion Protection Stability		rock subsiding or missing	Yes * No ✓
	Seepage		no colored seepage allowed (red, blue, yellow w/ crystallization)	Yes * No ✓
Runoff Control System	Diversion Channel		rock in place, channel not moving, fence stable	Yes ✓* No
	Diversion Swales		rock in place, no silting in or head cutting	Yes ✓* No ___
	Excessive silt build up at fence lines in diversion channel		allowed if not effecting cover system	Yes ___* No ✓

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 2 of 4 - Site Perimeter

Inspection Date:	10-24-09
Inspector:	D. Trunn
Visible Outlying Areas	
Observed Condition:	Normal
Observed Damage:	None May require repair: Yes ___* No ✓
Property Boundary Fence and Gate (walk fence line)	
Observed Condition:	Gate & Fence in good Repair.
Observed Damage:	None
Potential Corrective Actions:	None May require repair: Yes ___* No ✓
All Upgradient Areas (areas that drain onto property)	
Observed Condition:	No Change
Observed Damage:	None May require repair: Yes ___* No ✓

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 3 of 4 - Impoundment

Inspection Date: 10-24-09

Inspector: D. Turner

Outslopes

Observed Performance:								
	Rock Cover Subsidence:	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Excessive Slope Movement (failure):	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Gully Development:	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Observable Leachate (colored):	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Excessive Siltation (at slope toe):	Yes ___	No ✓	May require repair: Yes ___*	No ✓

Observed Damage: None

Potential Corrective Actions: None

Top (top surface soils)

Observed Performance:								
	Cracking (>1" width):	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Settlement / Evidence of Ponding:	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Erosion / Gullying:	Yes ___	No ✓	May require repair: Yes ___*	No ✓

Observed Damage: None

Potential Corrective Actions: None

Erosion Protection Layer (rock)

Observed Performance:								
	Rock Staying in Place:	Yes ✓	No ___	May require repair: Yes ___*	No ✓
	Rock Subsiding:	Yes ___	No ✓	May require repair: Yes ___*	No ✓
	Missing Rock:	Yes ___	No ✓	May require repair: Yes ___*	No ✓

Observed Damage: None

Potential Corrective Actions: None

* Mark all areas of concern or requiring repairs on attached site map.

Annual Site Inspection - Apex Site - Pond 2

Hecla Mining Company - Long-Term Maintenance and Monitoring Plan

Form 4 of 4 - Diversion Channel and Swales

Date: 10-24-02
Inspector: D. Tramm

Diversion Channel

Observed Performance:				
	Erosion Protection in place:	Yes ✓ No ___	May require repair: Yes ___* No ✓
	Normal Flow Channel in place:	Yes ✓ No ___	May require repair: Yes ___* No ✓
	Encroaching on Site Fencing:	Yes ___ No ✓	May require repair: Yes ___* No ✓

Observed Damage: NONE

Potential Corrective Actions: NONE

Diversion Swales

Observed Performance:			
	Erosion Protection in place:	Yes ✓ No ___	May require repair: Yes ___* No ✓
	Flow Channel Silting In:	Yes ___ No ✓	May require repair: Yes ___* No ✓
	Head Cutting:	Yes ___ No ✓	May require repair: Yes ___* No ✓

Observed Damage: NONE

Potential Corrective Actions: NONE

* Mark all areas of concern or requiring repairs on attached site map.

ALPHA ENGINEERING COMPANY

148 East Tabernacle, St. George, UT 84770 • (435) 628-6500 • Fax: (435) 628-6553

HECLA MINING SITE
MONUMENT MONITORING
(AS-BUILD DATE: AUGUST 17, 2009)

Monument #	Northing	Easting	Elevation	Remarks
#1	10121.42	10130.68	3685.54	Top alum. cap
#2	10146.06	10277.45	3685.70	Top alum. cap
#3	10092.40	10417.32	3685.86	Top alum. cap
#4	9966.72	10489.51	3685.65	Top alum. cap
#5	9865.73	10437.08	3686.41	Top alum. cap
#6	9807.90	10293.13	3686.27	Top alum. cap
#7	10013.39	10283.62	3686.86	Top alum. cap
#8	9989.98	10130.33	3685.62	Top alum. cap
#9	9862.85	10149.31	3685.59	Top alum. cap
#10	10006.08	9997.80	3678.03	Top alum. cap
#11	9964.21	10309.05	3684.53	Top alum. cap

MONSTER ENGINEERING INC
ENGINEERING ▫ DESIGN ▫ MANAGEMENT
3031 bonner spring ranch road
laporte, colorado 80535
(970) 221.7177
fax (970) 224.0161
email monster@peakpeak.com

MEMORANDUM

TO: Paul Glader (Hecla Mining Company)
FROM: Doug Gibbs (Monster Engineering Inc.)
DATE: 10/19/09
SUBJECT: **Surface Monument Survey Data Review – Apex Site**

Surface monument surveying has been conducted quarterly at the Apex Site by Alpha Engineering since January of 2006. Based on data collected through August 2009:

- Overall settlement of the reclaimed impoundment top surface continues to be very minor.
- Settlement rates continue to slightly decrease.

All data shown in the following table and graphs has been corrected based on maintaining a zero elevation change at Monument #10 (at the gate). This monument (#10) is the baseline from which all other monuments are surveyed, is located outside of the impoundment, and should show no movement between monitoring periods. Total and annual survey monument elevation changes since installation are shown in the following table.

Monument	Total Elevation Change Jan. 4, 2006 to August 17, 2009		Annual Elevation Change July 8, 2008 to August 17, 2009	
	(feet)	(inches)	(feet)	(inches)
1	-0.18	-2.2	-0.07	-0.8
2	-0.13	-1.6	-0.04	-0.5
3	-0.32	-3.8	-0.12	-1.4
4	-0.10	-1.2	-0.06	-0.7
5	-0.09	-1.1	-0.04	-0.5
6	-0.05	-0.6	-0.02	-0.2
7	-0.36	-4.3	-0.09	-1.1
8	-0.23	-2.8	-0.08	-1.0
9	-0.12	-1.4	-0.03	-0.4
10 (baseline @ gate)	NA	NA	NA	NA
11 / Main (impoundment center)	-0.09	-1.1	-0.04	-0.5
Average	**-0.17**	**-2.0**	**-0.06**	**-0.7**

NA – baseline monument - data corrected to show no movement

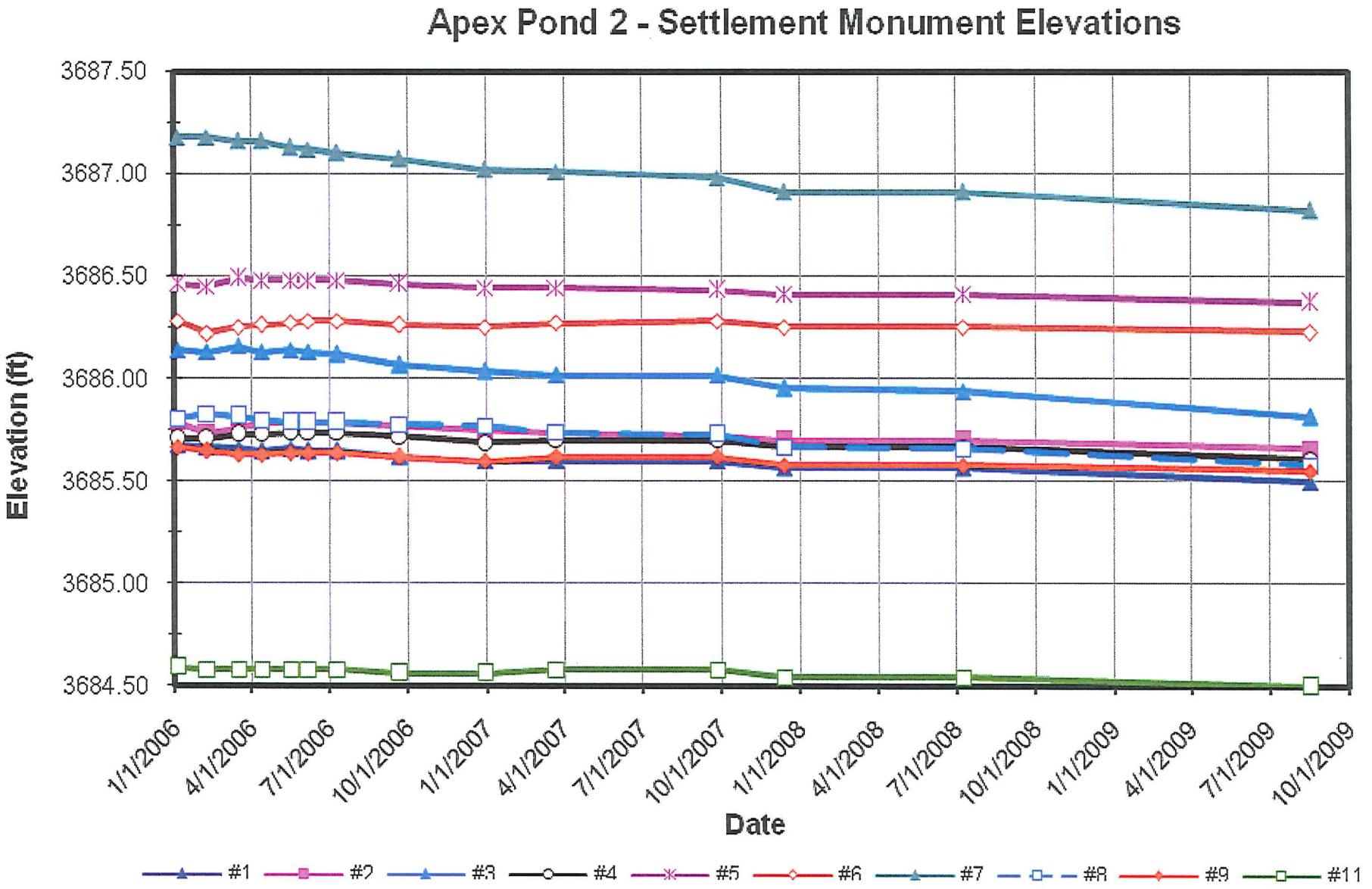
In summary the largest measured settlement is, as expected, near the center of the impoundment at -0.36 feet (monitor #7). Slightly greater settlement in and near the center of the impoundment is to be expected as significant quantities of fill were placed in this area during construction of the final cover system.

Survey data shows that the northern half of the impoundment has settled between 0.09 and 0.36 feet. The southern half of the impoundment has experienced very little settlement (0.05 to 0.12 feet). Greater settlement is expected in the northern half versus the southern half due to methods utilized to place the original cover system prior to final reclamation activities. According to Chris Gypton and Alan Wilson, placement of the original cover system started in the southwest corner. Additional cover materials were then dumped in that corner and pushed across the impoundment towards the northeast corner. The result of this placement method was that prior to final cover construction, the overall thickness of waste in the southern end of the impoundment was less than that in the northern end.

There continues to be no concerns to date with settlement. There are no low spots and no signs of ponding rain water. As expected with long-term consolidation, the data shows that settlement rates are slightly decreasing over time. Consolidation of waste materials and final reclamation cover materials appears to be very minimal and decreasing. Additionally, it is highly unlikely that any liquids are leaving the impoundment.

All elevation data provided by Alpha Engineering is presented graphically on the following pages. The first graph shows all monuments (except monitor #10 the baseline point) on a scale that allows all data to be compared. The next five graphs have expanded "Y" axes scales in order to more clearly show elevation changes, and for ease of comparison between graphs. A monument location map (provided by Alpha Engineering) is attached on the last page of this document. Included on this map are contours showing approximate total settlement of the top surface since installation of the monuments.

Based on data collected to date, MEI recommends that Hecla continue with their current plan and collect elevation data annually. Please contact me if you have any questions concerning this review.


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3687.50
3687.00
3686.50
3686.00
3685.50
3685.00
3684.50
1/1/2006
4/1/2006
7/1/2006
10/1/2006
1/1/2007
4/1/2007
7/1/2007
10/1/2007
1/1/2008
4/1/2008
7/1/2008
10/1/2008
1/1/2009
4/1/2009
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Date
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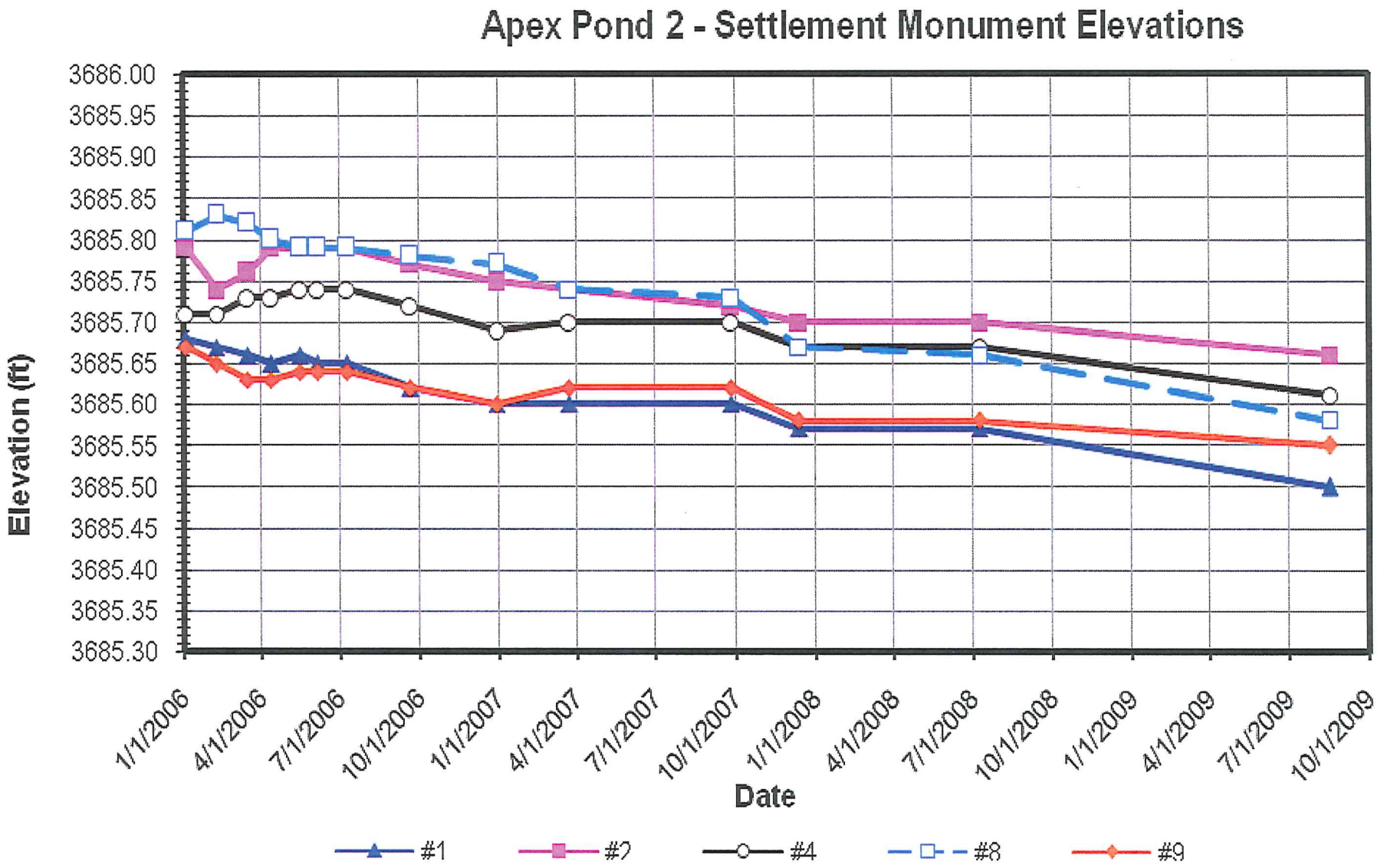
#3
#4
#5
#6
#7
#8
#9
#11


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3686.00
3685.95
3685.90
3685.85
3685.80
3685.75
3685.70
3685.65
3685.60
3685.55
3685.50
3685.45
3685.40
3685.35
3685.30
1/1/2006
4/1/2006
7/1/2006
10/1/2006
1/1/2007
4/1/2007
7/1/2007
10/1/2007
1/1/2008
4/1/2008
7/1/2008
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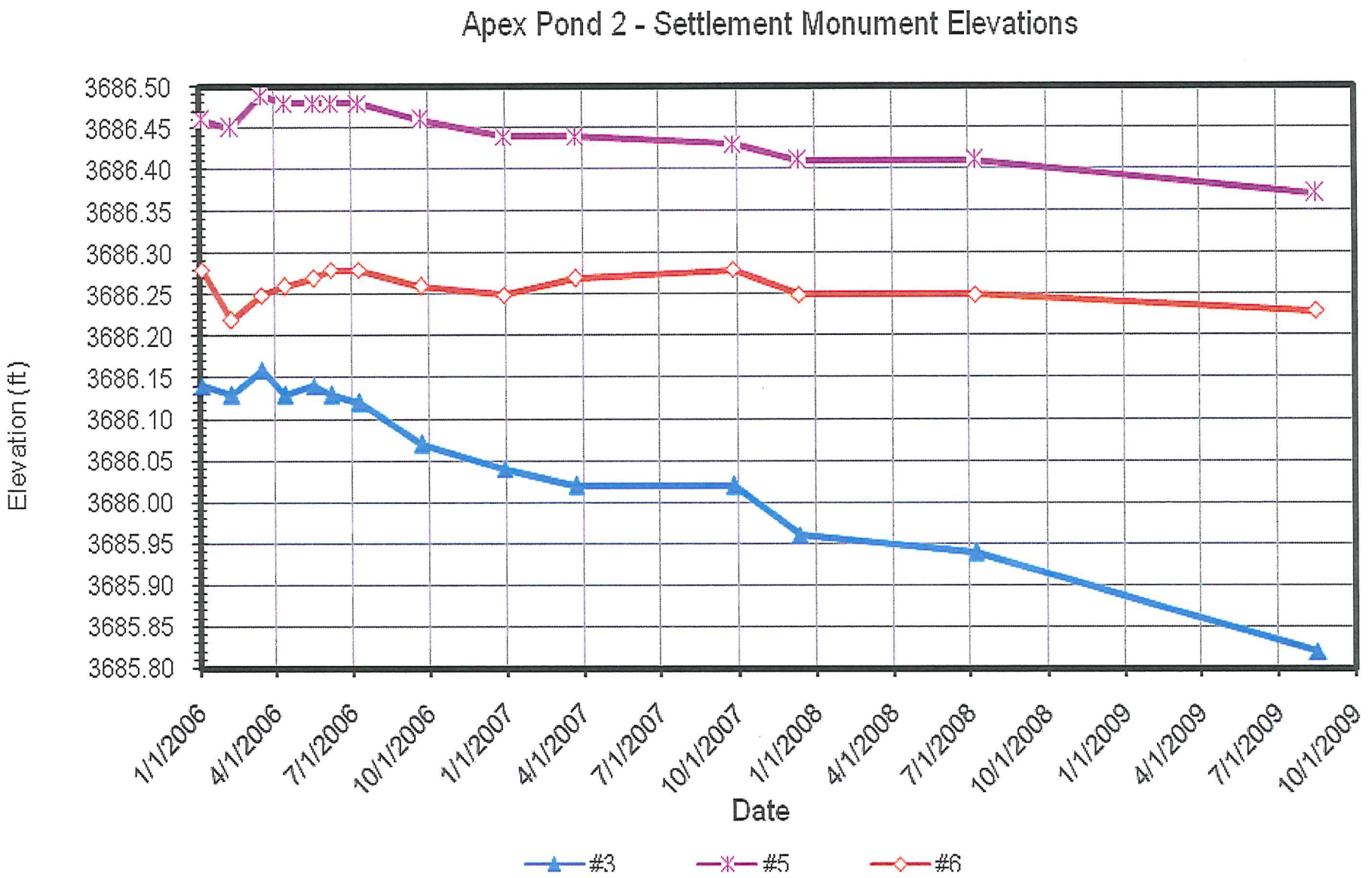
10/1/2009
Date
#1
#2
#4
#8
#9


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3686.50
3686.45
3686.40
3686.35
3686.30
3686.25
3686.20
3686.15
3686.10
3686.05
3686.00
3685.95
3685.90
3685.85
3685.80
1/1/2006
4/1/2006
7/1/2006
10/1/2006
1/1/2007
4/1/2007
7/1/2007
10/1/2007
1/1/2008
4/1/2008
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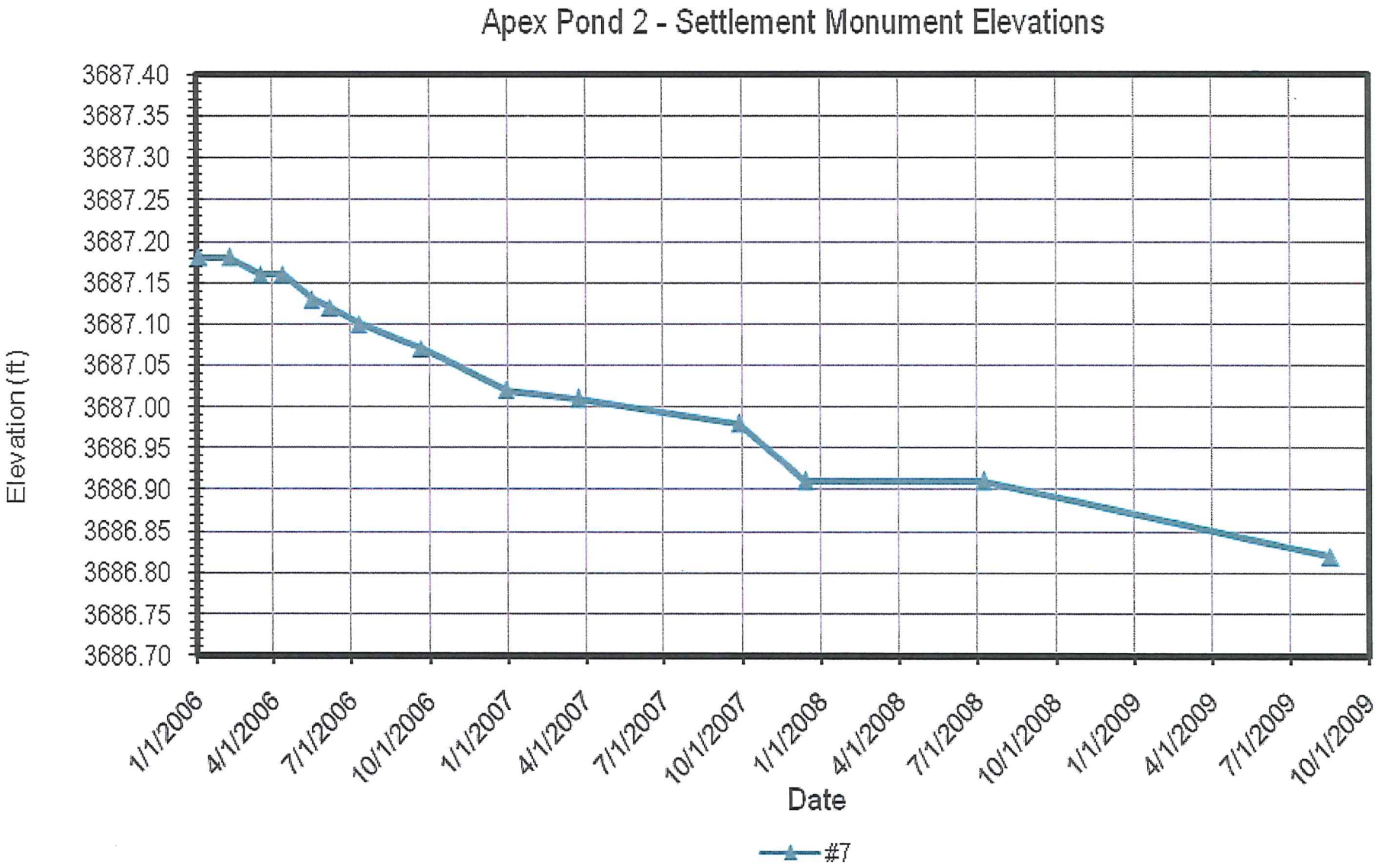
7/1/2009
10/1/2009
Date
#3
#5
#6


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3687.40
3687.35
3687.30
3687.25
3687.20
3687.15
3687.10
3687.05
3687.00
3686.95
3686.90
3686.85
3686.80
3686.75
3686.70
1/1/2006
4/1/2006
7/1/2006
10/1/2006
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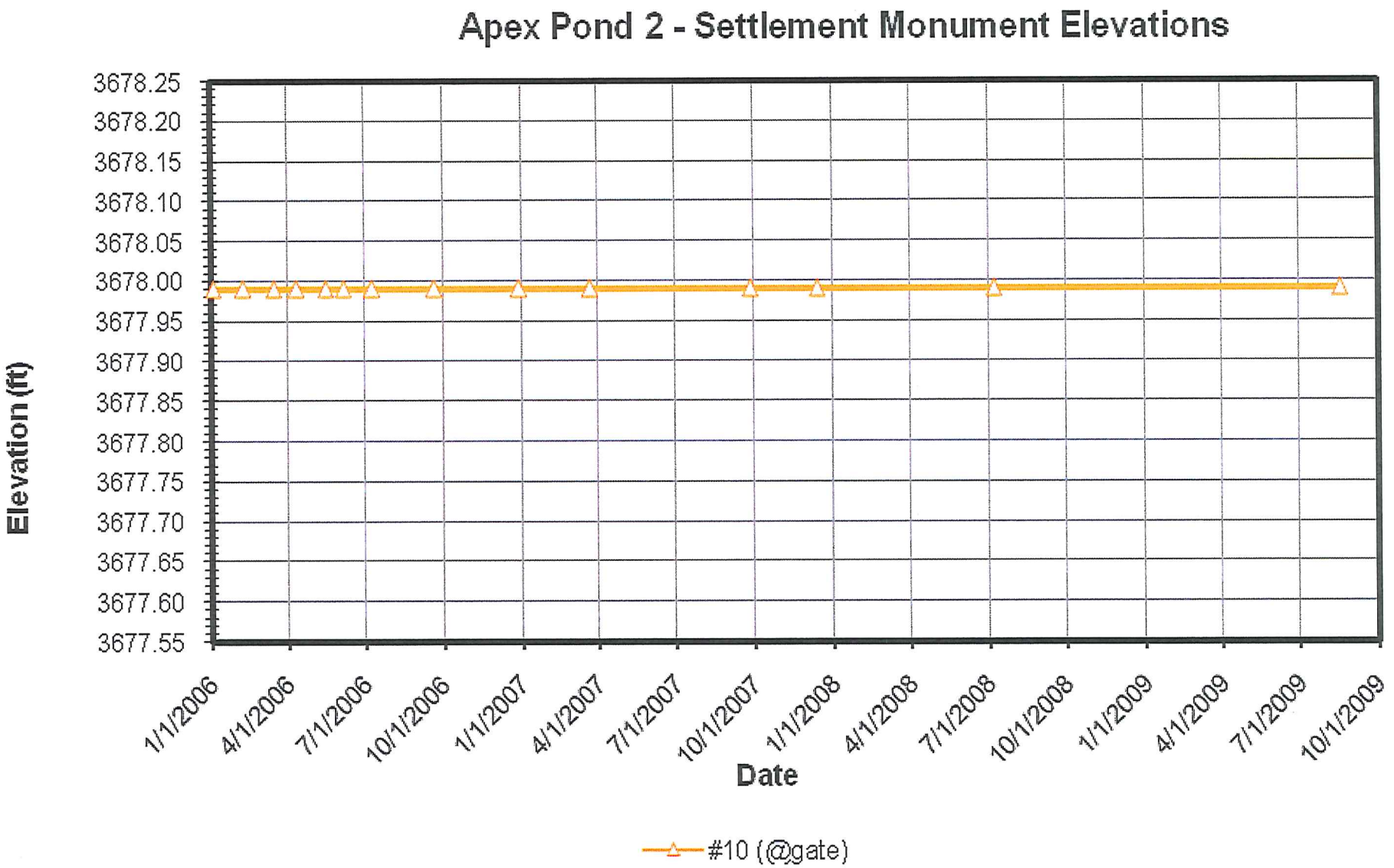
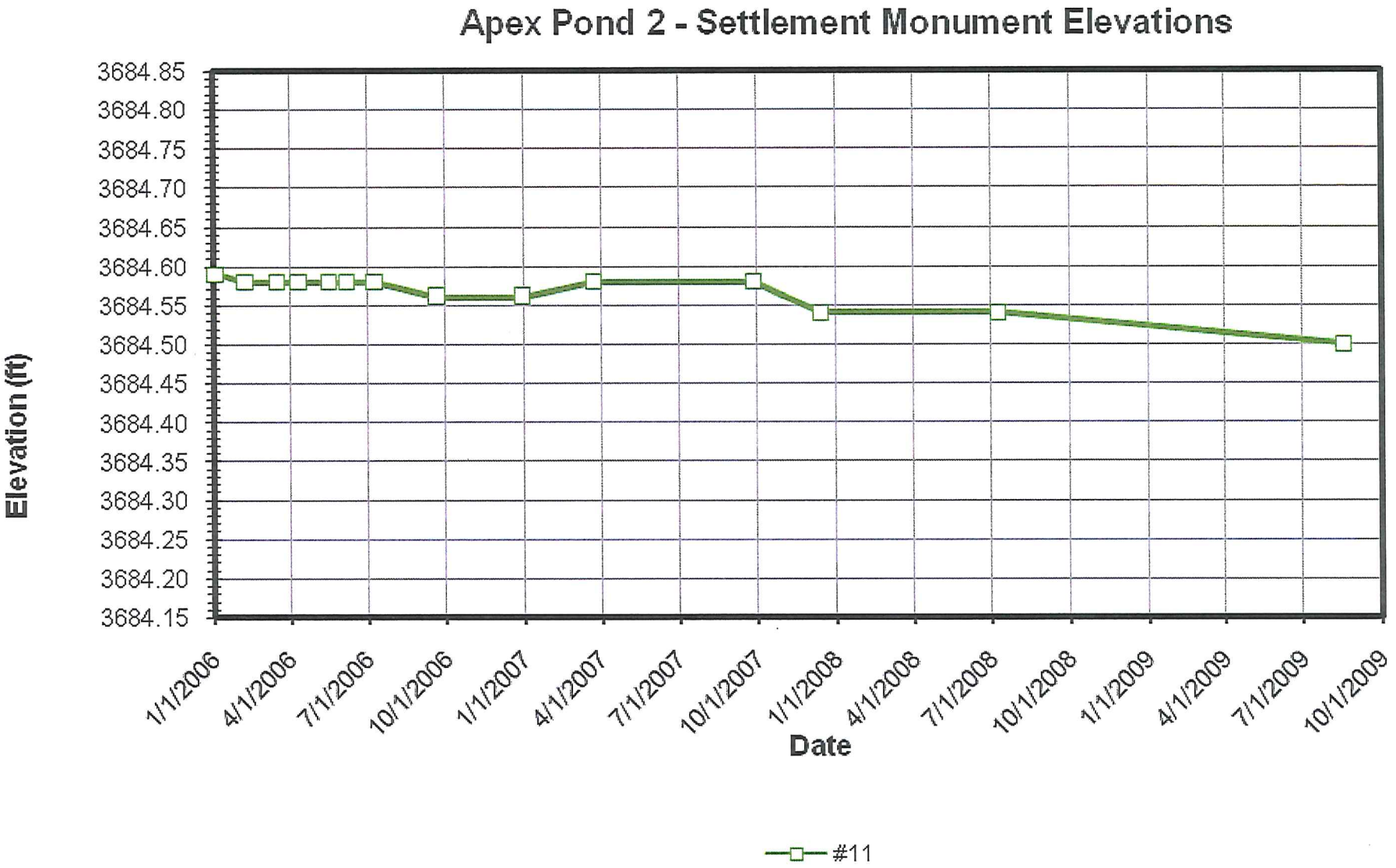
4/1/2007
7/1/2007
10/1/2007
1/1/2008
4/1/2008
7/1/2008
10/1/2008
1/1/2009
4/1/2009
7/1/2009
10/1/2009
Date
#7


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3678.25
3678.20
3678.15
3678.10
3678.05
3678.00
3677.95
3677.90
3677.85
3677.80
3677.75
3677.70
3677.65
3677.60
3677.55
1/1/2006
4/1/2006
7/1/2006
10/1/2006
1/1/2007
4/1/2007
7/1/2007
10/1/2007
1/1/2008
4/1/2008
7/1/2008
10/1/2008
1/1/2009
4/1/2009
7/1/2009
10/1/2009
Date
#10 (@gate)


Apex Pond 2 - Settlement Monument Elevations
Elevation (ft)
3684.85
3684.80
3684.75
3684.70
3684.65
3684.60
3684.55
3684.50
3684.45
3684.40
3684.35
3684.30
3684.25
3684.20
3684.15
1/1/2006
4/1/2006
7/1/2006
10/1/2006
1/1/2007
4/1/2007
7/1/2007
10/1/2007
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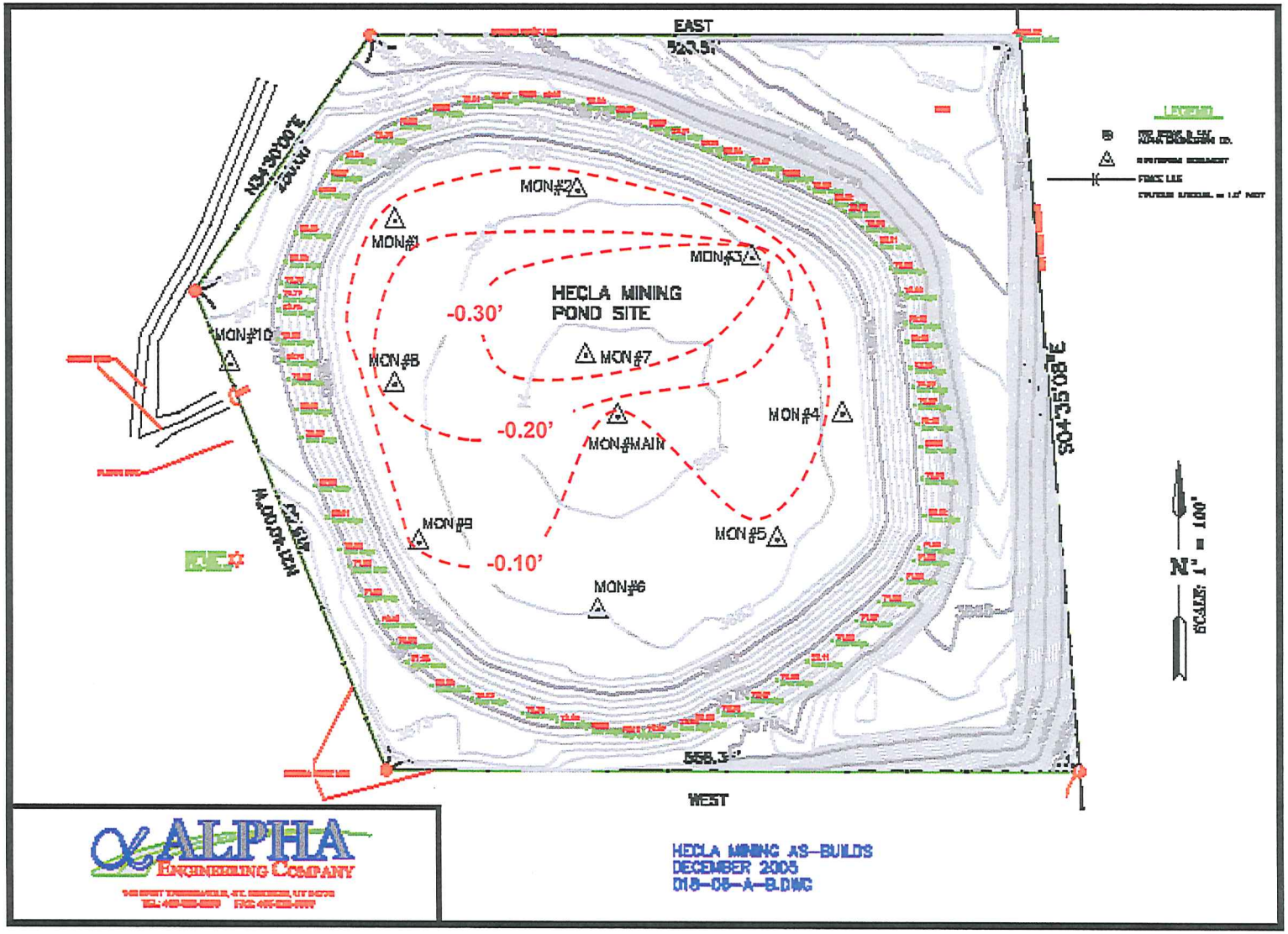
EAST
523.5'
MON#2
MON#1
MON#3
HECLA MINING
POND SITE
-0.30'
MON#10
MON#8
MON#7
-0.20'
MON#4
MON#MAIN
MON#9
MON#5
-0.10'
MON#6
S04°35'08"E
558.3'
WEST
1" = 100'
ALPHA
ENGINEERING COMPANY
HECLA MINING AS-BUILTS
DECEMBER 2005
018-05-A-B.DWG

Activity	2004 Budget	Revised Budget May 2004	Committed Cost this Period	Cumulative Committed Cost To Date 9-30-09	Forecasted Cost To Complete	Forecasted Final Cost	Remarks on Forecast to Complete
Phases I through III *(Completed February 2006)*							
Phase I - Drain Excess Liquid From Tailings	189,200	72,700		67,928	0	67,928	
Phases II, IIA + IIB - Evaporate Excess Liquid	6,000	8,000		242,882	0	242,882	
Phase III - Regrading & Final Cover System	337,000	342,050		504,742	0	504,742	
Field Indirect Costs	164,500	213,568		378,517	0	378,517	Includes Jan + Feb 2006 long term monitoring costs
Hecla Costs	18,700	18,700	0	33,324	0	33,324	
Subtotal Phases I through III	**715,400**	**655,018**	**0**	**1,227,393**	**0**	**1,227,393**	
Long Term Monitoring *(through FY 2010)*							
Site Inspections			176	189,815	4,898	194,713	
Settlement Monitoring				8,775	1,650	10,425	
Consultant Support:							
Annual Geotechnical Engineer Inspections				2,495	18,100	20,595	Includes settlement monitoring data analysis
Vegetation Monitoring			0	0	20,000	20,000	Allowance for surveys in FY 2008 - 2010
Site Conditions Review - MEI			255	7,669	2,132	9,801	
Site Conditions Review - SVL Analytical			0	2,079		2,079	
Erosion Repair Review - MEI				2,927	573	3,500	
Revegetation Review - Bamberg					3,500	3,500	
Maintenance:							
Erosion Repair Allowance				21,941	7,500	29,441	Erosion repair conducted April 2008
Revegetation Allowance				9,912	10,000	19,912	Revegetation conducted April 2008
Hecla Project Management Costs:							
Labor			0	2,266	7,909	10,175	
Travel expenses			0	0	1,312	1,312	
Subtotal Long Term Monitoring	**0**	**0**	**431**	**247,879**	**77,574**	**325,453**	
Total Pond 2 Final Closure	**715,400**	**655,018**	**431**	**1,475,272**	**77,574**	**1,552,846**	